

What is claimed is:

1. A chemical luminescence method using a biochemical analysis unit, comprising the steps of:

5 i) obtaining a biochemical analysis unit provided with a plurality of porous adsorptive regions, to which ligands or receptors have been bound respectively,

10 ii) subjecting a labeled receptor or a labeled ligand, which has been labeled with a labeling substance, to specific binding with the ligands or the receptors, each of which has been bound to one of the porous adsorptive regions of the biochemical analysis unit, the labeled receptor or the labeled ligand being thereby specifically bound to at least one of the ligands or at least one of the receptors,

15 iii) subjecting an enzyme-labeled antibody to specific binding with the labeled receptor or the labeled ligand, which has been specifically bound to at least one of the ligands or at least one of the receptors, and

20 iv) causing a chemical luminescence substrate to undergo a reaction with the enzyme-labeled antibody, which has been specifically bound to the labeled receptor or the labeled ligand,

25 wherein, at the time at which the enzyme-labeled antibody is subjected to the specific binding with the labeled receptor or the labeled ligand, which has been specifically bound to at least one of the ligands or at least one of the receptors, a reaction liquid containing the enzyme-labeled

antibody is forcibly caused to flow such that the reaction liquid containing the enzyme-labeled antibody flows across each of the porous adsorptive regions of the biochemical analysis unit.

2. A method as defined in Claim 1 wherein, after
5 the reaction liquid containing the enzyme-labeled antibody has been forcibly caused to flow such that the reaction liquid flows across each of the porous adsorptive regions of the biochemical analysis unit, the forcible flowing is ceased during a period of time longer than the period of time during which the reaction
10 liquid containing the enzyme-labeled antibody has been forcibly caused to flow.

3. A chemical luminescence method using a biochemical analysis unit, comprising the steps of:

i) obtaining a biochemical analysis unit provided
15 with a plurality of porous adsorptive regions, to which ligands or receptors have been bound respectively,

ii) subjecting a labeled receptor or a labeled ligand, which has been labeled with a labeling substance, to specific binding with the ligands or the receptors, each of which has
20 been bound to one of the porous adsorptive regions of the biochemical analysis unit, the labeled receptor or the labeled ligand being thereby specifically bound to at least one of the ligands or at least one of the receptors,

iii) subjecting an enzyme-labeled antibody to
25 specific binding with the labeled receptor or the labeled ligand, which has been specifically bound to at least one of the ligands

or at least one of the receptors, and

iv) causing a chemical luminescence substrate to undergo a reaction with the enzyme-labeled antibody, which has been specifically bound to the labeled receptor or the labeled ligand,

wherein, at the time at which the labeled receptor or the labeled ligand having been labeled with the labeling substance is subjected to the specific binding with the ligands or the receptors, each of which has been bound to one of the porous adsorptive regions of the biochemical analysis unit, a reaction liquid containing the labeled receptor or the labeled ligand, which has been labeled with the labeling substance, is forcibly caused to flow such that the reaction liquid containing the labeled receptor or the labeled ligand flows across each of the porous adsorptive regions of the biochemical analysis unit, and

wherein, at the time at which the enzyme-labeled antibody is subjected to the specific binding with the labeled receptor or the labeled ligand, which has been specifically bound to at least one of the ligands or at least one of the receptors, a reaction liquid containing the enzyme-labeled antibody is forcibly caused to flow such that the reaction liquid containing the enzyme-labeled antibody flows across each of the porous adsorptive regions of the biochemical analysis unit.

4. A method as defined in Claim 3 wherein, after the reaction liquid containing the enzyme-labeled antibody has

been forcibly caused to flow such that the reaction liquid flows across each of the porous adsorptive regions of the biochemical analysis unit, the forcible flowing is ceased during a period of time longer than the period of time during which the reaction liquid containing the enzyme-labeled antibody has been forcibly caused to flow.

5 5. A reaction apparatus for use in a chemical luminescence method, comprising:

10 i) a reaction vessel, which is provided with a support section for releasably supporting a biochemical analysis unit within the reaction vessel, the biochemical analysis unit being provided with a plurality of porous adsorptive regions, to which ligands or receptors have been bound respectively, the reaction vessel being adapted to perform
15 specific binding of a labeled receptor or a labeled ligand, which has been labeled with a labeling substance and has been specifically bound to at least one of the ligands or at least one of the receptors, and an enzyme-labeled antibody with each other, and

20 ii) flowing means for causing a reaction liquid containing the enzyme-labeled antibody to flow within the reaction vessel,

 wherein the flowing means forcibly causes the reaction liquid containing the enzyme-labeled antibody to flow
25 such that the reaction liquid containing the enzyme-labeled antibody flows across each of the porous adsorptive regions

of the biochemical analysis unit.

6. An apparatus as defined in Claim 5 wherein the flowing means also forcibly causes a reaction liquid containing the labeled receptor or the labeled ligand, which has been
5 labeled with the labeling substance, to flow such that the reaction liquid containing the labeled receptor or the labeled ligand flows across each of the porous adsorptive regions of the biochemical analysis unit.

7. An apparatus as defined in Claim 5 wherein the
10 flowing means operates such that, after the reaction liquid containing the enzyme-labeled antibody has been forcibly caused to flow such that the reaction liquid flows across each of the porous adsorptive regions of the biochemical analysis unit, the forcible flowing is ceased during a period of time longer
15 than the period of time during which the reaction liquid containing the enzyme-labeled antibody has been forcibly caused to flow.

8. An apparatus as defined in Claim 6 wherein the
20 flowing means operates such that, after the reaction liquid containing the enzyme-labeled antibody has been forcibly caused to flow such that the reaction liquid flows across each of the porous adsorptive regions of the biochemical analysis unit, the forcible flowing is ceased during a period of time longer
25 than the period of time during which the reaction liquid containing the enzyme-labeled antibody has been forcibly caused to flow.